

State Notes

TOPICS OF LEGISLATIVE INTEREST

May/June 2007



The Decline of the Forest Development Fund: Causes and Consequences **Briana Kleidon, Intern**

Established in 1993, the Forest Development Fund (FDF) serves to enhance the State forest system's management operations and practices. Revenue to the FDF is generated almost exclusively from the sale of State timber stands, along with a small amount of Federal funding. The revenue derived from the sale of timber and forest products is pledged to provide debt service on any bonds that may be issued for the Department of Natural Resources (DNR) by the Forest Finance Authority. To date, no bonds have been issued. Revenue not used to service bond debt is pledged to improving management practices in areas where intensive vegetation management for timber is the designated key value. The major obligations of the FDF include improving Michigan's timber stands, stabilizing the State's timber supply, and increasing the use of efficient and sustainable management practices on Michigan's forestland.

Along with the downward trend in revenue to the State's General Fund/General Purpose (GF/GP) budget, a number of the State's special and restricted funds also have experienced a decline in revenue over the past few years. The FDF is no exception. In FY 2005-06, revenue to the FDF decreased by 18.0% and the total balance of the Fund dropped 42.0% from FY 2004-05.¹ In determining the cause of the Fund's decline, a number of key factors including timber prices and State timber harvest volumes must be considered. In conjunction with decreasing revenue and reduced GF/GP support, appropriations for timber treatment activities have declined as FDF returns are shifted to other purposes such as fire protection.

Background

Michigan is home to an extensive stock of forestland that covers over 50.0% of the State, spanning more than 19.0 million acres. Approximately 21.0% of Michigan's forests are State-owned, designating the State as Michigan's largest landowner and making it directly responsible for the management of roughly 3.6 million acres of potentially harvestable forestland.² The rich abundance of timberland in Michigan exceeds that of all but four of the 50 states. Michigan's forests are a key component of both the environment and the State's economy for the recreational opportunities and forest products they provide.

With the expansion of the timber and forest products industry in Michigan in the 1980s, including greater numbers of paper mills and an overall increase in large sawmills, the State experienced a steady demand for timber through the 1990s. Continual growth in average timber prices was observed during this period for almost every Michigan timber species. Since 1990, the use of high-tech sawmills, as well as demand for quality hardwood such as oak and maple for furniture, flooring, and cabinetry, contributed to the continual growth in the prices of Michigan timber.

Timber Prices

As Figure 1 illustrates, revenue to the FDF from the sale of State timber harvests has grown steadily along with the rising price of timber, increasing at a stable rate from FY 1989-90 until FY 2003-04. Dramatic increases in timber prices in FY 2003-04 and FY 2004-05 are largely attributed to a decreased supply coupled with an increased demand for timber, due to growth in the housing

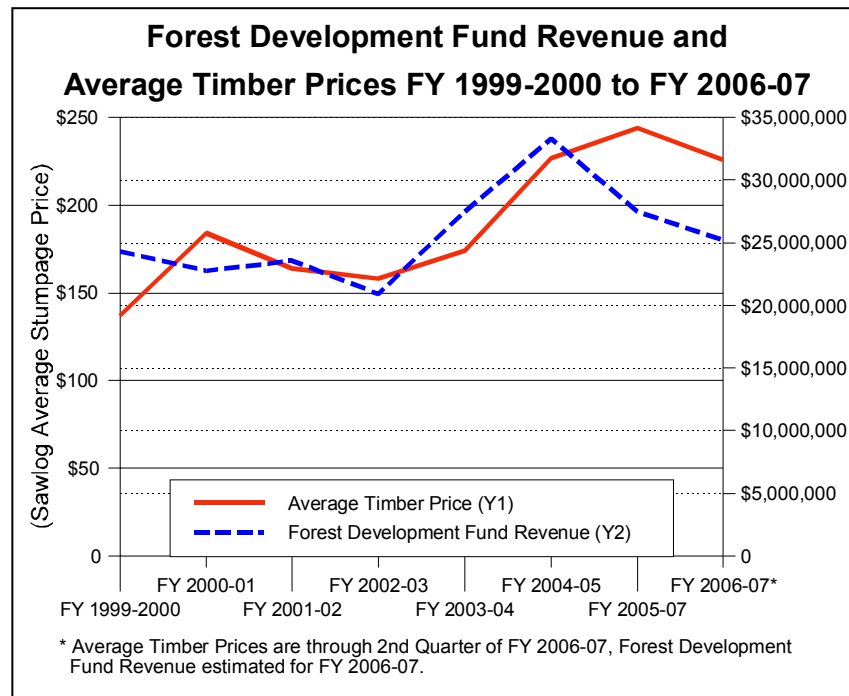
¹ Michigan Department of Natural Resources

² Michigan Department of Natural Resources <http://www.mi.gov/dnr/0,1607,7-153-30301---,00.html>



industry and a number of natural events, including Hurricane Katrina and the tsunami in Indonesia, which led to rebuilding and recovery efforts.

Figure 1



Source: Michigan Department of Natural Resources

Record-high timber prices throughout the Great Lakes region during this time period produced an overall increase in FDF revenue. Revenue to the FDF during this time grew at a rapid pace, increasing 31.7% between FY 2002-03 and FY 2003-04, growing an additional 21.2% in FY 2004-05, and remaining high through FY 2005-06 (Table 1).

Table 1

Forest Development Fund History			
Fiscal Year	Revenue	Expenditures	Ending Balance
1994-95			\$5,688,900
1995-96	\$17,410,300	\$(16,951,100)	6,148,100
1996-97	19,914,900	(19,017,500)	7,045,500
1997-98	18,467,400	(19,969,900)	5,543,000
1998-99	18,565,200	(19,375,000)	4,733,200
1999-2000	24,290,000	(20,560,500)	8,472,700
2000-01	22,742,300	(23,634,100)	7,580,900
2001-02	23,541,300	(24,523,100)	7,399,100
2002-03	20,902,900	(22,788,100)	5,513,900
2003-04	27,531,500	(24,764,900)	8,280,500
2004-05	33,380,000	(29,982,900)	11,677,600
2005-06	27,493,100	(37,438,400)	6,732,300

Source: Department of Natural Resources



Historically, revenue to the FDF has risen at a slow and steady pace. The record-setting timber prices between FY 2003-04 and FY 2005-06 can be considered an anomaly based on the specific market conditions, such as the booming home-building industry during the time period. Therefore, the drastic increases in revenue to the FDF in FY 2003-04 and FY 2004-05 were not the beginning of an ongoing trend of rapidly increasing revenue. The incongruity of the FY 2003-04 and FY 2004-05 revenue levels is further emphasized by the 18.0% revenue decrease experienced by the Fund in FY 2005-06. Current timber prices have significantly decreased, though they are still above the FY 2002-03 level before the spike (Figure 1). As demand has declined and the market corrects for the unsustainable highs, it is not surprising that revenue to the FDF has dropped as well.

Timber Harvest Volume

Since 2000, an average of 50,125 acres of timber per year has been harvested from the State's forests (Table 2). Each year, the harvestable acreage targets for the timber sale program are established in the boilerplate language of the annual DNR budget. The current targeted acreage of 63,000 acres annually was initially set in 2002. Previously, the targeted acreage was set at 855,000 cords per year. In FY 2000-01, language in the DNR budget was changed to increase the target from 855,000 cords to 69,000 acres, and the target was reduced to its current level of 63,000 acres one year later. Changing the target from volume (cords) to area (acreage) granted the DNR more flexibility to treat a target number of acres of forest rather than work under the pressure of producing a set volume of timber. This approach was expected to encourage better management of the State forests and avoid potential mismanagement of an immature stand in order to reach quota volumes.

Table 2	
Annual State Forest Harvests	
Fiscal Year	Acres
1999-2000	58,241
2000-01	45,608
2001-02	57,687
2002-03	46,318
2003-04	49,083
2004-05	50,774
2005-06	43,169

Source: Michigan Department of Natural Resources

Table 2 shows a slight downward trend of the State timber harvests during the past four years. The largest timber harvest of the past seven years occurred in FY 1999-2000, when 58,241 acres were harvested from State forestland. In FY 2005-06, timber harvests in the State fell to a 14-year low of 43,169 acres; a 26.0% decrease from the FY 1999-2000 level. Since FY 1999-2000, the State has been unsuccessful in meeting the established timber harvest target, with annual harvests averaging 20.4% below the target amount.

The DNR attributes this drop-off in timber harvesting to decreased revenue and the resulting staff and resource cutbacks within the Department. With reduced personnel, the DNR asserts that it is unable to mark recommended timber stands for harvest, therefore reducing the overall number of acres that can be treated and sold each year. Additionally, the time needed to prepare timber for commercial sale and removal is lengthened by reductions to DNR staff and resources dedicated to timber-marking. With the evaluation process currently requiring a time frame of up to 24 months,



fewer employees and pressure to complete the stand review process quickly will result in the marking of less timber. As a consequence, less timber is available for harvest and the State cannot reach its timber harvest goals. This creates a cycle of decreasing revenue from timber sales to the FDF, resulting in additional staff and resource cutbacks within the Department.

The DNR also faces pressure from Michigan's timber industry, which advocates increasing the target for harvestable acres to approximately 83,000 acres per year. These recommendations are based on U.S. Forest Service data that report that Michigan's forests are increasing in volume. While increased timber harvests could create additional revenue for the FDF, without adequate DNR staff and resources to evaluate and mark the timber, increased targets will be difficult, if not impossible, to reach.

Timber harvests that are frequently below established targets, along with declining timber prices, have contributed to decreases in FDF revenue. Without an alternative strategy for more accurately determining the availability of Michigan's timber stands and the resources to expedite the marking and prescription process (which determines the action that will be taken), it seems likely that the number of acres of Michigan's State timber that are harvested each year will continue to drop, bringing FDF revenue down with it.

Expanded Uses for FDF Appropriations

Forest Development Fund revenue, derived almost exclusively from State timber sales, is restricted to uses that promote sustainable State forest management and planning. In recent years, GF/GP revenue has been declining and all State department budgets have been reduced as a result. In order to make up for these GF/GP shortfalls in the DNR budget, FDF funds have been reallocated to other forest-related programs and away from some of their original, intended uses.

In FY 2001-02, a portion of the GF/GP support for the timber harvest appropriation was replaced with \$2.0 million in FDF revenue. Three years later, in order to reduce GF/GP appropriations further, the FY 2004-05 budget shifted \$1.0 million from the GF/GP budget to the FDF for forest fire protection. This occurred again in FY 2005-06 and FY 2006-07, with the budget including a shift from GF/GP to the FDF for fire protection activities in the amounts of \$350,000 and \$1.5 million, respectively. This has resulted in the use of an additional \$2.9 million in FDF revenue annually for fire protection services compared with the amount used in FY 2003-04.

Also, beginning in FY 2004-05, \$1.0 million from the FDF has been distributed as grants to soil conservation districts to provide forest management and planning services to private forestland owners. These grants, although forest-related, are not strictly in line with the intended purpose of the FDF.

The FDF appropriation for forest fire protection is used to fight forest fires on both State and private land. Although it is necessary to protect individual homes, property, and lives, these fund shifts draw revenue away from the primary purpose of the FDF. When the amount of GF/GP revenue supporting State forest fire protection services is decreased and replaced with FDF funds, revenue produced by the timber sale program is shifted away from a revenue-generating purpose to uses with no revenue-generating capabilities. The decisions to make these shifts were based on short-term increases in the FDF total Fund balance due to record-high timber prices, with the Fund growing 50.2% in FY 2003-04 and an additional 41.0% in FY 2004-05 ([Table 1](#)). It is possible that if GF/GP funding continues to decrease, more FDF revenue will be used for fire protection services.



The shifting of FDF funds to fire protection is a short-term solution that will result in the long-term consequence of lower FDF revenue, as available resources for timber marking and harvesting decrease.

Conclusion

The recent decline in revenue to the FDF can be attributed to a number of factors, rather than a single cause. As the price of timber levels off, falling from the previous unsustainable market high, revenue from State timber sales will continue to shrink and eventually stabilize around an estimated \$22.0 million to \$25.0 million per year. Additionally, the decline of timber harvests is an influential component of decreases to FDF revenue.

Given the State's current budgetary constraints and the demand for increased GF/GP funding in other areas of the overall State budget, departments with available restricted funds, such as the DNR, will continue to be asked to pay for a greater percentage of their operations from those restricted funds. Decreases in timber prices, declining volumes of timber harvested from State timber sales, and the shift of FDF revenue to nonrevenue-generating purposes will only accelerate the shrinking of the FDF's overall balance.

A shrinking FDF ultimately will mean less funding to support the marking and prescriptions of the State's timber stands. This equates not only to further reductions in timber harvesting and future revenue to the FDF, but also to decreased forest health through increases in disease and insects, as well as forest conversion by aggressive species. These outcomes will produce negative results for Michigan's environment and timber and forest products industry. As the well-known adage inquires, "If a tree falls in a forest and no one is there to hear it, does it make a sound?" In the case of the falling Forest Development Fund balance, it may eventually result in a reverberation that echoes beyond the forest.